

Arizona School Facilities Board Energy Conservation Design Criteria for New School Construction and Deficiency Projects

Building Envelope

- The envelope specifications will adhere to the prescriptive standards listed in ASHRAE 90.1-1999.
- Alternatively the designer may follow the directions for the use of a computer simulation under the Energy Cost Budget section of ASHRAE 90.1-1999.

Roofing Materials - Reflectivity

- Roofing products shall comply with the technical specifications of the U.S. EPA's Energy Star labeled Roof Products, on new school construction.

Interior Lighting

- Fluorescent lighting shall be T-8 tubes with electronic ballasts or better
- Lighting shall be controlled by occupancy sensors with manual override.
- Exit signs shall be LED with down lighting when required.

HVAC Equipment Efficiency

- Equipment (HVAC, kitchen, special systems, etc.) shall meet the standards set for the U.S. Department of Energy's Federal Energy Management Program.

HVAC Controls

- HVAC controls shall switch between unoccupied and occupied modes based on occupancy sensors or scheduling.
- HVAC scheduling controls shall have an override function.
- HVAC control systems shall include initial user training for operating personnel and retraining materials for the School District's subsequent use.

For Existing Buildings

- Based on a site energy audit approved by the district architect or engineer, the school district may propose energy saving measures that meet the 8-year "return on investment" requirement.
- The SFB staff will review the proposed energy measures and may utilize the Arizona Energy Office for technical assistance.

Utility Bill Tracking

- During the application process, the SFB will recommend that the district give permission to the Energy Office to have access to the utility bill history for the building(s) under consideration. This information will be used to assist the district in targeting cost effective energy improvements and to track energy savings resulting from upgrades.
- For new construction, the SFB will recommend that the school district provide access to the district's utility bill data by the Energy Office for review and benchmarking.